

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

HOW TO REVIEW A WATER WELL RECORD (WWC- 5 FORM AND WWC-5P FORM) FOR COMPLIANCE TO THE WATER WELL REGULATIONS

Procedure #: WWP-7

Narrative:

A water well record form WWC-5 is required for every water well constructed or reconstructed in the State of Kansas. Either form WWC-5 or WWC-5 'P' are used to report a water well that is plugged. These records are the cornerstone of the Water Well Program, since all necessary information about the constructed, reconstructed or plugged water well is detailed on the well record. By statute, K.S.A. 82a-1201 et.al., KDHE is required to ensure a water well record has been sent to KDHE and to ensure the water well record is complete and accurate. The purpose of this document is to describe the process by which the well record is reviewed for compliance with the water well regulations.

Water well records (WWC-5 Form and WWC-5P Form) are divided into 7 different sections. This review procedure, will go through each section of the record to insure the record is correctly completed and the well was constructed, reconstructed and/or plugged according to the Kansas Water Well Regulations.

Procedure:

Section 1, "Location of Water Well"

County: The county where the water well is located must be enter here. Such as Shawnee. There are 105 counties in the State of Kansas. (See attachment No. 1)

Fraction: The fraction should be broken down to the nearest 10-acre tract if at all possible. Such as NW1/4-NW1/4-NW1/4. (See attachment No. 2)

Section Number: The appropriate section number must be entered. There are usually 36 sections per each Township. (See attachment No. 3)

- **Township Number**: The appropriate township number must be entered. Townships are numbered, starting from the Kansas-Nebraska state line running south. The first row of townships directly south of the Kansas-Nebraska line is "Township 1 South". The further South the higher number of Township. (See attachment No. 3)
- **Range Number:** The appropriate range number must be entered. Ranges are divided into West ranges and East ranges. The lines separating the West from the East is the 4th Principle Meridian which is Meridian Street in Wichita. All ranges west of Meridian Street start at 1 West, getting higher the further west you are. All ranges east of Meridian Street start at 1 East. (See attachment No. 3)
- **Distance and direction from nearest town or the city street address of well if located within city:** If the well is located in a rural area the distance from the nearest city should be entered. For example: 2 miles South and 1.5 miles East of Berryton, Kansas. If the well is located within a city or town, the street address should be provided.

- Water Well Owner: The well owner's name must be listed in this section.
- **RR** #, **St.** Address, **Box** #: This is for the well owner's address. The rural route number, if located in a rural area, should be listed or the street address if available. A street address is preferable. A post office box number is also acceptable. This is not necessarily where the water well is located.
- **City, State, Zip Code**: The city, state and zip code must be included for the well owner. The city, state and zip code of the well owner is not necessarily where the well is located.
- **Board of Agriculture, Division of Water Resources, Application Number:** An approved application for permit to appropriate water for beneficial use shall be obtained by the well owner from the Division of Water Resources. All water wells must have permit numbers except for domestic, domestic-lawn and garden, injection and some air conditioning wells.

Section 3, "Locate Well's Location with an "X" in Section Box"

An "X" shall be placed in the one square mile (section) box corresponding to where the well is located within the section. This "X" must correspond with the location as described in Section 1 of the water well record.

Section 4,

- **Depth of Completed Well:** The depth of the completed well shall be placed in this space.
- **Elevation**: If the elevation is known, it should be placed in this space. However, it is not required by the contractor to supply this information.
- **Depth(s) Groundwater Encountered:** There are three spaces for the contractor to place the depths for which groundwater was encountered when he drilled the water well. If groundwater was encountered at only one depth, there should only be one entry.
- Well's Static Water Level: This is the measured depth the water is in the well after the well was completed. This depth should be included on the well record.
- **Ft. below land surface measured on mo/day/yr:** This the month, day and year the static water level was measured. This is not routinely recorded by the contractor and is not considered a necessity on the record.
- **Pump test data:** There are two places to record the groundwater level, in feet, after pumping the well for a period of time, in hours, at a set determined rate, in gallons per minute. This information is not routinely entered on the well record by the contractor and is not a reason to disallow the record from being entered into the data base.
- **Estimated Yield:** This is the estimated volume of water the well will produce and is expressed in gallons per minute.
- **Bore hole diameter:** This is the diameter of the original borehole, prior to the addition of casing and expressed in inches and the depth of the bore hole, which is expressed in feet. There is an additional space on the report to account for changes in the bore hole diameter and depths.
- **Water Well To Be Used As:** This section is self-explanatory. The contractor circles the well use. If it used for anything other than those types stated in above Section 2, above, a permit from the Division of Water Resources is needed.
- Was a chemical/bacteriological sample submitted to the Department? The contractor is to check, "yes" or "no" if the well had any chemical or bacteriological sample was taken. If "Yes" was checked then a date must be provided using Month/Day/ Year. This section is not used often and is not required for a complete record. Samples are rarely collected.
- Water Well Disinfected? The contractor must check the appropriate answer, "yes" or "no" regarding whether or not the well has been disinfected. Generally the contractor checks "Yes". It is a regulatory requirement for water well contractors to disinfect water wells. By checking "No" the contractor may be violating regulations and an explanation from the contractor is needed.

- **Type Of Blank Casing Used:** This section is self-explanatory. The contractor must circle the casing type used in the water well. The record is not complete if this is left blank.
- **Casing Joints:** In this section, the contractor states how the casing joints are connected. Such as glued, threaded, etc. This is not commonly completed and is not needed to enter the record into the data base.
- **Blank casing diameter:** The diameter of the casing being used in the well is stated in this section. The sections allows for three different sizes of casing and at three different lengths. The diameter of the casing is described in inches and the length is described in feet. This is required for the record to be entered into the data base. The diameter of the casing is important, since regulations state the maximum outside diameter of the casing shall be at least three inches smaller than the diameter of the borehole, as stated in Section 4 above, in which the casing is being installed in.
- **Casing height above land surface:** This is important and is required information, since regulations require well casing to extend at least 12 inches above grade. The value should be expressed in inches.
- **Casing weight:** This is not often completed by the contractor. The well record can be added to the data base without this information. The value is expressed in pounds per foot (lbs/ft).
- Casing wall thickness or gauge No.: The contractor states how thick the casing he installed in the well. This section is not routinely completed by the contractor and the well record can be entered into the data base without this information. Values are expressed in inches, such as .440 or .35, etc. The gauge # is expressed as schedule 40 or schedule 80, etc. This is important because there are regulations for the thickness of well casing for the varying sizes of diameter of well casing.
- **Type of Screen or Perforation Material:** The contractor must circle the material used. This information describes the material the screen or perforated area is manufactured with. This information is required to be provided by the contractor.
- **Screen or Perforation Openings are:** The contractor must circle the correct type of screen material. This information describes how the screen or perforated area is developed. This information is required to be provided by the contractor.
- **Screen-Perforated Intervals:** There are four different places the contractor can place different screened intervals, if the well was constructed with different screened intervals. This information is required and the contractor must fill the appropriate screening interval on the form so the information can be added to the data base. Values are expressed in feet.
- **Gravel Pack intervals:** There are four different places the contractor can place different screened intervals, if the well was constructed with different gravel pack intervals. This is not required information to enter the information into the data base. Values are expressed in feet.

Section 6,

- **Grout Material:** There are four choices for the type of grout material used; neat cement, cement, bentonite and other. The first three are KDHE's only approved grouting material. The contractor must circle the grout used. If the contractor circle "other" he may have used an unapproved grouting material and could be in violation.
- **Grout Intervals:** There are three different spaces on the well record the contractor can enter grouted intervals. This is required information and is needed before the data can be entered into the data base. Values are expressed in feet.
- What is the nearest source of possible contamination: The record list 16 different possible sources of contamination and the contractor is to circle the type of contamination that is nearest to the water well. This is not required information and does not need to be provided for the well record to be entered into the data base.
- **Direction from the well (contamination source)?:** If the contractor circled a contamination source above then the contractor must complete this section. The direction is listed as; Southwest,

North, East, etc. This information is required if the contractor circled a contamination source.

How many feet?: If the contractor circled a contamination source above then the contractor must complete this section. The distance is reported in feet.

Lithologic Log: When using a WWC-5 Form for reporting a constructed water well, this section must be completed. In this section the contractor must report what rock type he encountered and at what depth while drilling the water well. For example:

<u>From</u>	<u>To</u>	<u>Lithologic log</u>
0'	4'	Top Soil
4'	20'	Brown Clay
20'	35'	Sand
35'	45'	Gray Clay
45'	60'	Sand and Gravel

This is required information and has to be completed by the contractor or the well record can not be entered into the data base.

Plugging intervals: When using either a WWC-5 or WWC-5P Forms for reporting a plugged water well, this section must be completed. In this section the contractor, landowner or consultant must report how the well was plugged. For Example:

<u>From</u>	<u>To</u>	<u>Plugging Intervals</u>
60'	40'	Chlorinated sand
40'	25'	Compacted clays
25'	3'	Bentonite chips
3'	0	Top soil

This is required information and must be completed by the person plugging the water well or the record can not be entered into the data base.

Section 7,

Contractor's or Landowner's Certification: In this section, on a WWC-5 Form, the contractor or landowner circles constructed or reconstructed or plugged, depending on what action that was done to the well. This is required information to enter the record on the data base. A Kansas Water Well Contractor's License is required to construct, reconstruct and treat water wells is Kansas. A license is not required to plug water wells in Kansas.

Completed on (mo/day/year): The date the work was completed that prompted the water well record. This is required information to enter the record into the data base.

Kansas Water Well Contractor's License No.: If the work was done by a licensed water well contractor, the contractor must place their license number in the section. This is required information.

This Water Well Record was completed on (mo/day/yr): The date the water well record was completed is to be placed in this section. It is a requirement that the record be sent to KDHE within 30 days from when the work on the well was complete. This is required information.

Under the business name of: If the individual is operating as a business, they should list the name of the business in this section. If an individual is working for a licensed water well contractor, the water well contractor's name should be placed in this section, not the individual's name.

By (signature): The person that is completing the record should sign the record. This is required information. A signature is required for a complete water well record.

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